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Ni, Jian
Rosen, Craig A.
Zhang, Jun

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gggaatgaac ctctgaantg ccagtgaaaa tcagncaagc aggccgacca aacaagccag 180

antccatnca ctgtggtcat caccaaggta acagacagct accctgagcc aacccagctc 240

cttcatgggg accaagtttg tttgcgaant aggttagcaa ctggttccag cccattttac 300

cttgggggcc agttctnctt gncaagaagg ggacaagctt atggtggaac gttcatanca 360

tcntttttgg gtggntttac acaaaagg 388

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<210> 14
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<212> DNA
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<210> 16
<211> 36
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<400> 16

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<210> 17
<211> 56
<212> DNA
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<400> 17
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<210> 18
<211> 733
<212> DNA
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aattcgaggg tgcaccgtca gtcttcctct tccccccaaa acccaaggac accctcatga 120

tctcccggac tcctgaggtc acatgcgtgg tggtggacgt aagccacgaa gaccctgagg 180

tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg 240

aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact 300

ggctgaatgg caaggagtac aagtgcaagg tctccaacaa agccctccca acccccatcg 360

agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc 420

catcccggga tgagctgacc aagaaccagg tcagcctgac ctgcctggtc aaaggcttct 480

atccaagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac aactacaaga 540

ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg 600

acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc 660

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gactctagag gat 733

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ctggtgttgc tccccttcct tgcaggactc accacatacc tgcttgtcag ccagctccgg 180

gcccagggag aggcctgtgt gcagttccag gctctaaaag gacaggagtt tgcaccttca 240

catcagcaag tttatgcacc tcttagagca gacggagata agccaagggc acacctgaca 300

gttgtgagac aaactcccac acagcacttt aaaaatcagt tcccagctct gcactgggaa 360

catgaactag gcctggcctt caccaagaac cgaatgaact ataccaacaa attcctgctg 420

atcccagagt cgggagacta cttcatttac tcccaggtca cattccgtgg gatgacctct 480

gagtgcagtg aaatcagaca agcaggccga ccaaacaagc cagactccat cactgtggtc 540

atcaccaagg taacagacag ctaccctgag ccaacccagc tcctcatggg gaccaagtct 600

gtatgcgaag taggtagcaa ctggttccag cccatctacc tcggagccat gttctccttg 660

caagaagggg acaagctaat ggtgaacgtc agtgacatct ctttggtgga ttacacaaaa 720

gaagataaaa ccttctttgg agccttctta ctataggagg agagcaaata tcattatatg 780

aaagtcctct gccaccgagt tcctaatttt ctttgttcaa atgtaattat aaccaggggt 840

tttcttgggg ccgggagtag ggcattccca cagggacaac ggtttagcta tgaaatttgg 900

ggcccaaaat ttcacacttc atgtgcctta ctgatgagag tactaactgg aaaaaggctg 960

aagagagcaa atatattatt aagatgggtt ggaggattgg cgagtttcta aatattaaga 1020

cactgatcac taaatgaatg gatgatctac tcgggtcagg attgaaagag aaatatttca 1080

acaccttcct gctatacaat ggtcaccagt ggtcca 1116

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<211> 251
<212> PRT
<213> Homo sapiens

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Ala Arg Trp Ala Leu Thr Cys Cys Leu Val Leu Leu Pro Phe Leu Ala
35 40 45

Gly Leu Thr Thr Tyr Leu Leu Val Ser Gln Leu Arg Ala Gln Gly Glu
50 55 60

Ala Cys Val Gln Phe Gln Ala Leu Lys Gly Gln Glu Phe Ala Pro Ser
65 70 75 80

His Gln Gln Val Tyr Ala Pro Leu Arg Ala Asp Gly Asp Lys Pro Arg
85 90 95

Ala His Leu Thr Val Val Arg Gln Thr Pro Thr Gln His Phe Lys Asn
100 105 110

Gln Phe Pro Ala Leu His Trp Glu His Glu Leu Gly Leu Ala Phe Thr
115 120 125

Lys Asn Arg Met Asn Tyr Thr Asn Lys Phe Leu Leu Ile Pro Glu Ser
130 135 140

Gly Asp Tyr Phe Ile Tyr Ser Gln Val Thr Phe Arg Gly Met Thr Ser
145 150 155 160

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Glu Cys Ser Glu Ile Arg Gln Ala Gly Arg Pro Asn Lys Pro Asp Ser
                165                 170                 175

Ile Thr Val Val Ile Thr Lys Val Thr Asp Ser Tyr Pro Glu Pro Thr
            180                 185                 190

Gln Leu Leu Met Gly Thr Lys Ser Val Cys Glu Val Gly Ser Asn Trp
        195                 200                 205

Phe Gln Pro Ile Tyr Leu Gly Ala Met Phe Ser Leu Gln Glu Gly Asp
    210                 215                 220

Lys Leu Met Val Asn Val Ser Asp Ile Ser Leu Val Asp Tyr Thr Lys
225                 230                 235                 240

Glu Asp Lys Thr Phe Phe Gly Ala Phe Leu Leu
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caagaagggg acnagctaat ggtgaacgtc agtgacatct ctttggtgga ttacacaaaa 180

gaagataaaa ccttctttgg agccttctta ctataggagg agagcaaata tcattatatg 240

aaagtcctct gccaccgagt tcctaatttt ctttgttcaa atgtaattat aaccaggggt 300

tttcttgggg ccgggagtag ggggcattcc cacagggaca acggtttagc tatgaaattt 360

gggggggccca aaatttcaca acttcatngt tgcccttact tgatgagaag tacttaactt 420

gganaaaagg cttg 434

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nnnttnnaat gctgccagag cacggcagct gcaggcccaa ggccaggagc agcagcgcac 120

gctgggctct cacctgctgc ctggtgttgc tccccttcct tgcaggactc accacatacc 180

tgcttgtcag ccagcttcgg gnccagggng aggcctgtgt gcagttccag ggtctaaaag 240

gacaggagtt tgcaccttca catcagcaag tttatgcacc tnttagagca gacggagata 300

agccangggg acaactgaca nttgtgagac aaattccaca cagnanttta aaatcagttt 360

ccagttttga atggggacan nattaggctg gcttnacaag accgntggat tttacag 417

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aaattcctgc tgatcccaga ntcgggagac tacttcattt actcccaggt cacattccgt 120

gggaatgaac ctctgaantg ccagtgaaaa tcagncaagc aggccgacca aacaagccag 180

antccatnca ctgtggtcat caccaaggta acagacagct accctgagcc aacccagctc 240

cttcatgggg accaagtttg tttgcgaant aggttagcaa ctggttccag cccattttac 300

cttgggggcc agttctnctt gncaagaagg ggacaagctt atggtggaac gttcatanca 360

tcnttttttgg gtggntttac acaaaagg 388

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cccaaaattt cacacttcat gtgccttact gatgagagta ctaactggaa aaaggctgna 120

agagagcaaa tatattatta agatgggttg gaggattggc gagtttctaa atattaagac 180

actggatcac tgaaatgaat ggatgatcta ctcgggtcca ggattgaaag agaaatattt 240

caacaccttc ctgctataca atggtcacca gtggtccagt tattgttcca atttggatcc 300

atnaatttgc nttcaattcc aggagctttg gaaggaattc caaggaaagc tccaggaaaa 360

ccgtattaaa ctttccaggg gccaaantcc ttcaccaatt ttttccacna actttccagg 420

cctgncncaa aaaaatggaa agggngttgg tangtccc

458

Sub a3 concluded

1

2